tion. Illustrative examples of the oil which may be used in this invention include avocado, coconut, corn, cottonseed, fish oil, flaxseed, grape, olive, palm, peanut, rapeseed, safflower, sesame, soybean, sunflower oil, mixtures thereof and the like. In a preferred embodiment, the oil used in this invention is soybean oil.

[0024] When preparing the water-in-oil emulsion of the primary phase of the w/o/w emulsion of this invention, from about 0.01 to about 12.0%, and preferably, from about 0.1 to about 10.0%, and most preferably, from about 1.0 to about 5.0% by weight primary emulsifier is used, based on total weight of the primary phase, and including all ranges subsumed therein. Typically, primary emulsifier (i.e., emulsifier selected for use in the primary phase) is added (preferably with stirring and heating) to the oil, and an oil and primary emulsifier mixture is obtained. Water is usually added (with stirring) to oil at about ambient temperature after the primary emulsifier has been completely dissolved in the oil to produce the primary emulsion of the primary phase. The amount of water added to the primary phase (W1) is such that the amount added is greater than the amount of water in the external aqueous phase (W2) of the desired w/o/w emulsion, and preferably, from about 55.0 to about 90.0%, and most preferably, from about 60.0 to about 75.0% of the total weight of water in the w/o/w emulsion is in the primary phase.

[0025] The primary emulsifier used in the w/o/w emulsion of the present invention typically has a hydrophilic-lypophilic number (HLB) of less than about 9.0, and preferably, less than about 6.5, and most preferably, from about 1.0 to about 4.0, including all ranges subsumed therein. Illustrative examples of the primary emulsifiers that can be used in the primary phase of this invention include nonionics like cetyl and stearyl trioleate, tristearate, sesquioleate, monoleate, monostearate, monopalmitate and monolaurate sorbitan (and derivatives thereof), all of which are made available under the name(s) Brij, Span and/or Tween by ICI Surfactants.

[0026] Other primary emulsifiers that may be used in this invention include nonionic copolymers of ethylene oxide and propylene oxide made available under the name Pluronic by BASF AG. Even other primary emulsifiers that may be used in this invention include lecithin and mono- and diglycerides, as well as polyglycerol polyricinoleate (PGPR). The preferred primary emulsifier used in this invention is PGPR.

[0027] The external phase emulsifier (i.e., emulsifier used in the external phase) used in this invention often has an HLB of greater than about 9.0, and preferably, greater than about 11.0, and most preferably, from about 12.0 to about 18.0, including all ranges subsumed therein. Such an emulsifier can be added to and dissolved in water to produce an external phase mixture. Examples of the external phase emulsifier suitable for use in this invention include PEG 20 tristearate, PEG 20 trioleate, PEG 20 monostearate, PEG 20 monooleate, PEG 20 monopalmitate and PEG 20 monolaurate sorbitan, derivatives thereof, mixtures thereof and the like, also made available by ICI Surfactants under the names Tween or Span. The preferred external phase emulsifier employable in this invention is, however, a phospholipoprotein, and especially, egg yolk derived phospholipoprotein modified with phospholipase A as disclosed in U.S. Pat. No. 5,028,447, the disclosure of which is incorporated herein by reference.

[0028] The amount of external phase emulsifier employed in the w/o/w emulsion of this invention is typically from about 1.0 to about 7.0%, and preferably, from about 1.5% to about 6.0%, and most preferably, from about 3.0 to about 5.5% by weight external phase emulsifier, based on total weight of the w/o/w emulsion and including all ranges subsumed therein.

[0029] Subsequent to preparing the primary emulsion and the external phase mixture, the primary emulsion may be added to the external phase mixture, preferably while stirring. The resulting rough w/o/w emulsion may then be fed to a size reducing and mixing apparatus such as a conventional homogenizer, colloid mill, sonicator, cross-flow membrane emulsifier, static mixer, or microfluidation device. In a preferred embodiment, the rough w/o/w emulsion is fed through a colloid mill and the w/o/w emulsion produced has oil droplets having diameters that are from about 5.0 to about 35.0, and preferably, from about 6.0 to about 25.0, and most preferably, from about 7.0 to about 15.0 microns, including all ranges subsumed therein. The water droplets of the primary phase water-in-oil emulsion produced have diameters that are from about 0.5 to about 6.0, and preferably, from about 1.0 to about 5.0, and most preferably, from about 1.0 to about 4.0 microns, including all ranges subsumed therein. In an especially preferred embodiment, the primary emulsion is subjected to a size reducing apparatus (so that the primary phase droplets are about 1.0 to about 4.0 microns in diameter) before being combined with the external phase mixture. The resulting desired reduced sourness w/o/w emulsion typically has a viscosity from about 10,000 to about 150,000, and preferably, from about 30,000 to about 130,000, and most preferably, from about 60,000 to about 100,000 cps.

[0030] In an especially preferred embodiment, acidulant is added to the water in both the primary phase and the external aqueous phase prior to the formation of the w/o/w emulsion. Typically, at least about 50.0%, and preferably, at least about 55.0 to 65.0% by weight of acidulant is added in to the primary phase, based on total weight of acidulant used in the reduced sourness w/o/w emulsion of this invention. The amount of acidulant employed in the w/o/w emulsion of the present invention is typically from about 0.1 to about 0.8%, and preferably, from about 0.2 to about 0.6%, and most preferably, from about 0.25 to about 0.45% by weight acidulant, based on total weight of the w/o/w emulsion and including all ranges subsumed therein. In yet another preferred embodiment, the concentration of free hydrogen for the acid employed is greater in the external aqueous phase. There is essentially no limitation with respect to the type of acidulant used in the w/o/w emulsion of the present invention other than that the acidulant is suitable for use in an edible composition. Illustrative acidulants that may be used in this invention include acetic acid (i.e., vinegar), lactic acid, tartaric acid, hydrochloric acid, malic acid, phosphoric acid, mixtures thereof and the like.

[0031] Optional additives that may be employed in the emulsion of this invention include artificial and natural food grade flavors and colors; protein powders like whey protein; thickening agents like microcrystalline cellulose, pectin,